

What is claimed is:

1. A recording method for a record medium,
comprising the steps of:

adding right information containing at least
5 copyright management information to at least one of a
plurality of pieces of input data; and

performing a signal process for the plurality
of pieces of the input data in the unit of data to
which the right information has been added so as to
10 record the processed data to the record medium.

2. The recording method as set forth in claim 1,
further comprising the step of:

performing an encrypting process for data to
which the right information has been added in the unit
of data to which the right information has been added.
15

3. The recording method as set forth in claim 1,
wherein when the right information has been
added in the unit of a plurality of pieces of the input
data, the signal process for the plurality of pieces of
20 the input data is performed in the unit of the
plurality of pieces of the input data to which the
right information has been added so as to record the
processed data to the record medium.

4. The recording method as set forth in claim 3,
25 further comprising the step of:

performing an encrypting process for a
plurality of pieces of data to which the right

information has been added in the unit of a plurality of pieces of data to which the right information has been added.

5. The recording method as set forth in claim 3, further comprising the step of:

selecting a first manner of which the right information is added in the unit of one of the plurality of pieces of the input data or a second manner of which the right information is added in the unit of the plurality of pieces of the input data corresponding to supplied designation information.

6. A recording apparatus for a record medium, comprising:

a first adding circuit portion for adding right information to one of a plurality of pieces of input data;

a second adding circuit portion for adding right information to the plurality of pieces of the input data in the unit of the plurality of pieces of the input data;

a signal processing portion for performing a signal process for data to which the right information has been added so as to record the processed data to the record medium;

a recording portion for recoding data to the record medium corresponding to output data of said signal processing portion; and

a selecting circuit portion for selectively supplying output data of said first adding circuit portion or output data of said second adding circuit portion to said signal processing portion.

5 7. The recording apparatus as set forth in claim 6, further comprising:

a first encrypting circuit portion for performing an encrypting process for the output data of said first adding circuit portion; and

10 a second encrypting circuit portion for performing an encrypting process for the output data of said second adding circuit portion,

15 wherein said first encrypting circuit portion is disposed between said first adding circuit portion and said selecting circuit portion, and

wherein said second encrypting circuit portion is disposed between said second adding circuit portion and said selecting circuit portion.

20 8. A recording method for a record medium, comprising the steps of:

performing an encrypting process for at least one of a plurality of pieces of input data; and

25 performing a signal process for the plurality of pieces of the input data in the unit of data for which the encrypting process has been performed so as to record the processed data to the record medium.

9. The recording method as set forth in claim 8,

further comprising the step of:

adding right information to the data for which the encrypting process has been performed in the unit of the data for which the encrypting process has been performed.

10. The recording method as set forth in claim 8, wherein when the encrypting process is performed in the unit of the plurality of pieces of the input data, the signal process is performed in the unit of the plurality of pieces of data for which the encrypting process has been performed so as to record the processed data to the record medium.

11. The recording method as set forth in claim 10, further comprising the step of:

adding right information to the plurality of pieces of data for which the encrypting process has been performed in the unit of the plurality of pieces of data for which the encrypting process has been performed.

12. The recording method as set forth in claim 10, further comprising the step of:

selecting a first manner of which the encrypting process is performed for one of the plurality of pieces of the input data or a second manner of which the encrypting process is performed for a plurality of pieces of the input data corresponding to supplied designation information.

13. A recording apparatus for a record medium,
comprising:

a first encrypting circuit portion for
performing an encrypting process for one of a plurality
of pieces of input data;

a second encrypting circuit portion for
performing an encrypting process for a plurality of
pieces of the input data in the unit of the plurality
of pieces of the input data;

a signal processing portion for performing a
signal process for the encrypted data so as to record
the processed data to the record medium;

a recording portion for recording data to the
record medium corresponding to output data of said
signal processing portion; and

a selecting circuit portion for selectively
supplying output data of said first encrypting circuit
portion or output data of said second encrypting
circuit.

14. The recording apparatus as set forth in claim
13, further comprising:

a first adding circuit portion for adding
right information to the output data of said first
encrypting circuit portion; and

a second adding circuit portion for adding
right information to the output data of said second
encrypting circuit portion,

wherein said first adding circuit portion is disposed between said first encrypting circuit portion and said selecting circuit portion, and

wherein said second adding portion is disposed between said second encrypting circuit portion and said selecting circuit portion.

15. A recording method for a record medium, comprising the steps of:

adding right information containing at least copyright management information to a plurality of pieces of input data in the unit of at least one of the plurality of pieces of the input data;

performing an encrypting process for the data to which the right information has been added;

adding right information containing at least copyright management information to the plurality of pieces of the data in the unit of the plurality of pieces of the data for which the encrypting process has been performed;

performing an encrypting process for the data to which the right information has been added;

performing a signal process for the plurality of pieces of the data for which the encrypting process has been performed; and

recording the data for which the signal process has been performed to the record medium.

16. A reproducing method for a record medium,

comprising the steps of:

reading at least key information from data
that is read from the record medium;

determining whether an encoding process
5 containing at least an encrypting process has been
performed for data that has been read from the record
medium in the unit of at least one of a plurality of
pieces of the data or an encoding process containing at
least an encrypting process has been performed for the
10 data that has been read from the record medium in the
unit of the plurality of pieces of the data;

decoding the plurality of pieces of data that
has been read from the record medium in the unit of one
of the plurality of the data using the key information
15 when the determined result at the determining step
represents that the encoding process has been performed
for the data that has been read from the record medium
in the unit of one of the plurality of pieces of the
data; and

20 decoding the plurality of pieces of data that
has been read from the record medium using the key
information in the unit of the plurality of pieces of
the data when the determined result at the determining
step represents that the encoding process has been
25 performed for the data that has been read from the
record medium in the unit of the plurality of pieces of
the data.

17. The reproducing method as set forth in claim
16,

wherein location information that represents
a recorded location of at least the key information is
5 recorded so that the location information is read
earlier than the data.

18. The reproducing method as set forth in claim
16, further comprising the steps of:

reading determination information from the
10 record medium; and

determining whether an encoding process
containing at least an encrypting process has been
performed for data recorded on the record medium in the
unit of one of a plurality of pieces of the data or an
15 encoding process containing at least an encrypting
process has been performed for data recorded on the
record medium in the unit of a plurality of pieces of
the data,

wherein the determination information is
20 recorded on the record medium for determining whether
the encoding process containing at least the encrypting
process has been performed for the data recorded on the
record medium in the unit of one of a plurality of
pieces of the data or the encoding process containing
25 at least the encrypting process has been performed for
the data recorded on the record medium in the unit of a
plurality of pieces of the data.

19. A reproducing method for a record medium,
comprising the steps of:

reading right information containing at least
copyright management information from data that has
been read from a record medium;

determining whether or not data that is read
from the record medium corresponding to a data read
command is capable of being read in the unit of one of
a plurality of pieces of the data corresponding to the
right information that has been read; and

reading the data designated with the data
read command from the record medium when the determined
result at the determining step represents that the data
is capable of being read in the unit of one of the
plurality of pieces of the data.

20. The reproducing method as set forth in claim
19, further comprising the step of:

controlling a reproducing process for the
data designated with the data read command
corresponding to the right information when the
determined result at the determining step represents
that the data is capable of being read in the unit of
one of a plurality of pieces of the data and the data
designated with the data read command is read.

21. The reproducing method as set forth in claim
20, further comprising the step of:

stopping reading the data designated with the

data read command from the record medium when the determined result at the determining step represents that the data is not capable of being read in the unit of one of a plurality of pieces of the data.

22. The reproducing method as set forth in claim 20, further comprising the step of:
displaying an alarm message.

23. A reproducing method for a record medium, comprising the steps of:

reading right information containing at least copyright management information from data that has been read from a record medium;

determining whether or not a plurality of pieces of data are capable of being read corresponding to the right information that has been read when a read command for reading a plurality of pieces of the data is issued; and

reading the plurality of pieces of the data designated with the read command when the determining step represents that the data is capable of being read in the unit of a plurality of pieces of the data.

24. The reproducing method as set forth in claim 23, further comprising the step of:

controlling a reproducing process for the plurality of pieces of data designated with the read command corresponding to the right information when the determining step represents that the data is capable of

being read in the unit of a plurality of pieces of the data and the plurality of pieces of the data designated with the read command are read.

25. The reproducing method as set forth in claim 23, further comprising the step of:

stopping reading the plurality of pieces of the data designated with the read command from the record medium when the determined result at the determining step represents that the data is prohibited from being read in the unit of a plurality of pieces of the data.

26. The reproducing method as set forth in claim 25, further comprising the step of:

displaying an alarm message.

27. An output controlling method for data, comprising the steps of:

determining whether data is capable of being read in the unit of one or a plurality of pieces of the data corresponding to right information containing at least copyright management information added to the data when a data read command for reading one of the plurality of pieces of data is issued; and

controlling the output of the data designated with the data read command when the determined result at the determining step represents that the data is capable of being read in the unit of one of the plurality of pieces of the data.

28. The output controlling method as set forth in claim 27, further comprising the step of:

prohibiting the data designated with the data read command from being output when the right information that has been read prohibits the data from being copied.

29. The output controlling method as set forth in claim 27, further comprising the step of:

outputting the data designated with the data read command when the right information that has been read permits copying the data.

30. The output controlling method as set forth in claim 27, further comprising the step of:

stopping reading the data designated with the read command when the determined result of the determining step represents that the data is capable of being read in the unit of the plurality of pieces of the data.

31. The output controlling method as set forth in claim 27, further comprising the step of:

controlling the output of a plurality of pieces of the data designated with the data read command corresponding to the right information that has been read when a data read command for reading a plurality of pieces of the data has been issued and the determined result of the determining step represents that the data is capable of being read in the unit of a

plurality of pieces of the data.

32. The output controlling method as set forth in claim 31, further comprising the step of:

outputting the plurality of pieces of the data designated with the data read command when the right information permits copying the data in the unit of a plurality of pieces of the data.

33. The output controlling method as set forth in claim 31, further comprising the step of:

prohibiting the plurality of pieces of the data designated with the data read command when the right information prohibits the data from being copied in the unit of a plurality of pieces of the data.

34. A record medium on which data has been recorded in the unit of which right information containing at least copyright management information has been added or in the unit of which an encrypting process has been performed.

35. The record medium as set forth in claim 34, wherein in addition to the data recorded on the record medium, determination information for determining whether an encoding process including at least an encrypting process has been performed in the unit of one of a plurality of pieces of the data or an encoding process including at least an encrypting process has been performed in the unit of a plurality of pieces of the data has been recorded, the encoding

process being performed for the data that is recorded to the record medium.

36. The record medium as set forth in claim 35,

wherein the determination information has

5 been recorded at a location of which the determination information is read earlier than the data.

37. The record medium as set forth in claim 34,

wherein the right information contains key

information for decrypting the data.

10

09555888-061901